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DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
LAND USE PLANNING COMMISSION
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PERMIT

WETLANDS ALTERATION PERMIT WL 74 BY SPECIAL EXCEPTION

The staff of the Maine Land Use Planning Commission, after reviewing the application and supporting documents submitted by Ryan P. and Andrea P. Cox for Wetlands Alteration Permit WL 74 by Special Exception, finds the following facts:

1. Applicants: Ryan P. Cox
Andrea P. Cox
PO Box 55
Round Pond, Maine 04564
2. Date of Completed Application: January 30, 2014
3. Location of Proposal: Marsh Island, Lincoln County, Maine
Maine Revenue Service Map LI065; Plan 01; Lot 190.4
Lincoln County Registry of Deeds: Book 4506; Page 4
Judgment Quiet Title Action, May 12, 1997
Lincoln County Registry of Deeds: Book 2259; Page 129
(Being Lot 4 on Plan of Proposed Lots on Marsh Island made for
Mrs. Harriet Harvey et al, dated May 17, 1996 and recorded in
Lincoln County Registry of Deeds Plan: Book 57; Page 81)
4. Zoning: (P-FP) Flood Prone Area Protection Subdistrict
(P-SL1) Shoreland Protection Subdistrict
(P-WL1) Wetland Protection Subdistrict
Federal Emergency Management Agency (FEMA) Zone VE (EL 14)
5. Lot Size: 3.1[±] Acres (owned)
6. Shoreland Structures: Proposed Private, Non-Commercial Permanent Docking Structure (6 ft. by 40 ft.)
Proposed Temporary Ramp (4 ft. by 40 ft.)
Proposed Temporary Float (10 ft. by 20 ft.)
7. Affected Waterbody: Atlantic Ocean, Marsh Harbor

Administrative History

8. Building Permit BP 14740, issued to Ryan P. and Andrea P. Cox on March 15, 2012, authorized the construction of a 24 foot by 32 foot residential dwelling with a 10 foot by 32 foot porch (both on post foundations), a 16 foot by 16 foot shed on a post foundation, and a primitive wastewater disposal system consisting of an alternative toilet and a graywater field. All structures were to be setback outside the (P-FP) Flood Prone Protection and FEMA Zone VE (EL 14) or at least 75 feet from the mean high water level of the Atlantic Ocean (whichever was greater), and at least 15 feet from the side and rear property boundary lines.
9. Amendment A to Building Permit BP 14740, issued to Ryan P. and Andrea P. Cox on September 23, 2013, authorized a minor change in the location of the proposed structures. All structures were to be setback outside the (P-FP) Flood Prone Protection and FEMA Zone VE (EL 14) or at least 75 feet from the mean high water level of the Atlantic Ocean (whichever was greater), and at least 15 feet from the side and rear property boundary lines. Construction of the permitted structures is ongoing.

Proposal

10. The applicants own a 3.1 acre lot which has approximately 318.49 feet of water frontage on Marsh Island. The shoreline consists of rocky ledge with rockweed cover. The applicants propose to construct and maintain a 6 foot by 40 foot permanent wooden dock with railings, and install a 4 foot by 40 foot temporary aluminum ramp and a 10 foot by 20 foot temporary wooden float. The applicants would remove 4 to 5 trees to install the dock. The proposed dock would be set back approximately 25 feet from the nearest property boundary line and would be used by the applicants for safe egress and ingress to their residential lot from Marsh Harbor.
11. The dock would extend 12 feet seaward of the mean high water level and would permanently impact approximately 72 square feet, by shading, below the mean high water level of the Atlantic Ocean. The temporary ramp and float would impact, by shading, approximately 360 square feet below the mean high water level of the Atlantic Ocean. The ramp and float would extend past the mean low water level and there would be at least 5± feet of water under the float at mean lower low water. The proposal would impact 432 square feet of (P-WL) Wetland Protection Subdistrict.
12. There are no existing or proposed public permanent docking structures located on Marsh Island. There are three private permanent docking structures on the island; however, these structures are not available to the applicants. In addition, the applicants' lot does not have an existing sandy beach where a small boat may be landed and pulled ashore and it is not reasonable or practicable to pull or lift a small boat and supplies to the shoreline while walking on rockweed and algae covered ledge and boulders. Lastly, the applicants state that it is infeasible to utilize a temporary docking structure due to the shoreline and ocean wind and wave actions.
13. The permanent docking structure would be located in a FEMA Zone VE (EL 14). The applicants state that the dock would be adequately anchored to prevent floatation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Further the dock would be constructed of oak pilings which are resistant to flood damage and the applicants would use construction methods to minimize flood damage.
14. The project would be designed, constructed, anchored, braced, and pinned as outlined in Wetland Alteration Permit application WL 74; Exhibit E, stamped November 06, 2013; and Supplement S-4 Construction Details, stamped January 30, 2014.

Agency Review Comments

15. The Maine Department of Inland Fisheries and Wildlife reviewed the proposal and commented (*summarized*) that the Department has no problem with the pier as it is relatively short; however, the Department stresses that large tree removal should be discouraged and kept to an absolute minimum in order to maintain riparian wildlife habitat.

Commission Review Criteria

16. According to Sections 10.23,C,3,d,(2), 10.23,L,3,d,(3), and 10.23,N,3,d,(1) of the Commission's Land Use Districts and Standards "the Commission's Standards", new permanent docking structures may be allowed within a (P-FP) Flood Prone Area Protection Subdistrict or FEMA zones A, AE, A1-30, or VE, a (P-SL) Shoreland Protection Subdistrict, and a (P-WL) Wetlands Protection Subdistrict respectively, as a special exceptions upon issuance of a permit from the Commission pursuant to 12 M.R.S.A. §685-A(10), and subject to the applicable requirements set forth in Sub-Chapter III, provided that the applicant shows by substantial evidence that (a) there is no alternative site which is both suitable to the proposed use and reasonably available to the applicant; (b) the use can be buffered from those other uses and resources within the subdistrict with which it is incompatible; and (c) such other conditions are met that the Commission may reasonably impose in accordance with the policies of the Comprehensive Land Use Plan.
17. According to Section 10.23,N,2,a,(1),(b) of the Commission's Standards, coastal wetlands, together with areas below the high water mark of tidal waters and extending seaward to the limits of the State's jurisdiction are designate as (P-WL1): wetlands of special significance.
18. According to Section 10.25,P,1,c,(3) of the Commission's Standards, Tier 3 reviews are for projects altering any area of P-WL1 wetlands.
19. According to Section 10.25,P,1,b,(2) of the Commission's Standards, if a proposed activities requires a permit and will alter 500 or more square feet of P-WL1 wetland, the Commission may require, as a condition of approval, mitigation, including compensation, in conformance with the provisions of Section 10.25,P,2.
20. According to Section 10.25,P,2,a,(2) of the Commission's Standards, projects requiring a Tier 3 review must not cause a loss in wetland area, functions and values if there is a practicable alternative to the project that would be less damaging to the environment. Each Tier 3 application must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist.
21. According to Section 10.25,P,2,e,(2) of the Commission's Standards, the Commission may waive the requirement for a functional assessment, compensation, or both. The Commission may waive the requirement for a functional assessment if it already possesses the information necessary to determine the functions of the area proposed to be altered. The Commission may waive the requirement for compensation if it determines that any impact to wetland functions and values from the activity will be insignificant.

22. According to the Development Standards for Activities in Flood Prone Areas, Section 10.25,T,2 of the Commission's Standards, development in flood prone areas, including areas of special flood hazard, shall:
- (1) Be designed or modified and adequately anchored to prevent flotation (excluding floating piers and docks), collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
 - (2) Use construction materials that are resistant to flood damage;
 - (3) Use construction methods and practices that will minimize flood damage; and
 - (4) Use electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during flooding conditions.
23. According to Section 10.27,O,2,a,(1) of the Commission's Standards, new permanent docking structures may be approved only where the applicant has demonstrated by substantial evidence that: (a) the siting, location, and size of such structure will not interfere with navigation; and (b) in the case of permanent docking structures to serve private, non-commercial activities, it is infeasible to utilize a temporary docking structure due to unusual or extraordinary physical conditions of the site, including, but not limited to, conditions that will not allow anchoring of a temporary structure or wind and wave action sufficient to preclude the use of a temporary structure. The burden of proof is on the applicant to demonstrate the necessary site condition.
24. According to Section 10.27,O,2,a,(2) of the Commission's Standards, the special exception criteria of "no alternative site" shall be judged according to the following:
- (a) Proximity to public or commercial dock:
For private, non-commercial docks located on an island, the following shall constitute "an alternative site reasonably available to the applicant":
 - (iii) An existing public or commercial dock located on the island where the applicant's dock would be located; or
 - (iv) A proposed public or commercial dock located on the island where the applicant's dock would be located, provide such a facility is proposed for construction within 2 years of the date of the application;
 - (b) Proximity to other means of access:
For private, non-commercial docks, an existing sandy beach area where a small boat may be landed and pulled ashore shall constitute "an alternative site reasonably available to the applicant"; and
 - (c) Proximity to less ecologically sensitive areas:
An alternative site that would result in the least environmental impact while still providing access shall constitute "an alternative site reasonably available to the applicant".
25. According to the Maximum Dimension Standards for New Permanent Docking Structures, Section 10.27,O,2,b of the Commission's Standards, a private, non-commercial docking structure must be no longer or wider than is necessary for the use intended; must not be constructed within a marked navigable channel; and must extend no farther than 100 feet beyond the mean lower low water level, or no farther than is necessary to achieve a draft of 5 feet of water at mean lower low water, whichever is less.
26. According to the Construction Standards for New Permanent Docking Structures, Section 10.27,O,4 of the Commission's Standards, a private, non-commercial docking structure must be constructed using methods, such as pilings, that allow for free flowing water and fish passage beneath the dock and the use of untreated lumber is preferred, although pressure-treated wood approved by the U.S. Environmental Protection Agency for dock construction may be used. Creosote or pentachlorophenol (PCP) treated wood must not be used.

27. The facts are otherwise as represented in Wetlands Alteration Permit application WL 74 by Special Exception and supporting documents.

Based upon the above Findings, the staff Concludes that:

1. In accordance with the provisions of Sections 10.23,C,3,d,(2), 10.23,L,3,d,(3), 10.23,N,3,d,(1), and 10.27,O,2,a,(2) of the Commission's Standards, the proposed permanent docking structure meets the special exception criteria for approval. Specifically, no public or commercial docks are located on Marsh Island; there are no existing sand and gravel beaches on the applicants' lot which would allow for the landing of a small boat; and the permanent docking structure has been proposed in a location where there are no ecologically sensitive areas. Furthermore, the proposed area of construction can be buffered from those other uses and resources within the subdistricts with which it is incompatible.
2. In accordance with the provisions of Section 10.25,P,2,a,(2) of the Commission's Standards, the proposed permanent docking structure meets the requirements for a Tier 3 review. Specifically, the alternative analysis demonstrated no practicable alternative that would be less damaging to the environment while providing safe and reliable ingress and egress, free from risk, during four-season use of the island. The applicants demonstrated that at all tides it is not reasonable or practicable to pull or lift a small boat and supplies to the shoreline while walking on rockweed and algae covered ledge and boulders and that the area chosen for the structure is free of ecologically sensitive resources.
3. In accordance with the provisions of Sections 10.25,P,1,b,(2) and 10.25,P,2,e,(2) of the Commission's Standards, no functional assessment or compensation will be required. The permanent impacts have been limited to less than 500 square feet of (P-WL) Wetland Protection Subdistrict.
4. In accordance with the Development Standards for Activities in Flood Prone Areas, Section 10.25,T,2 of the Commission's Standards, the proposed permanent docking structure meets the requirements for approval. Specifically, the docking structure has been designed of flood resistant material and will be adequately anchor to prevent floatation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
5. The proposal complies with Section 10.27,O,2,a,(1), the Maximum Dimension Standards of Section 10.27,O,2,b, and the Construction Standards of Section 10.27,O,4 of the Commission's Standards. Specifically, the proposed siting, location, and size of the dock will not interfere with navigation. Due to wind and wave action, it is infeasible to utilize a temporary docking structure. Further, the pile supported dock extends only as far as needed to achieve and maintain a draft of 5 feet of water and will be constructed of non-treated and only pressure-treated wood approved by the U.S. Environmental Protection Agency.
6. If carried out in compliance with the Conditions below, the proposal will meet the Criteria for Approval, section 685-B(4) of the Commission's Statutes, 12 M.R.S.A.

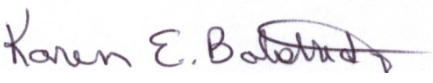
Therefore, the staff approves the application of Ryan P. and Andrea P. Cox with the following Conditions:

1. The *Standard Conditions of Approval for All Shoreland Alteration Permits*, revised April 1991, a copy of which is attached.
2. The proposal shall be constructed and maintained in conformance with the *Standards for Permanent Docking Structures*, Section 10.27,O of the Commission's Standards, revised September 01, 2013, a copy of which is attached.

3. The proposal shall be constructed and maintained in conformance with the *Activities in Flood Prone Areas*, Section 10.25,T of the Commission's Standards, revised September 01, 2013, a copy of which is attached.
4. The permittee shall secure and comply with all applicable licenses, permits, authorizations, and requirements of all federal, state, and local agencies including but not limited to: the Department of the Army, Army Corps of Engineers; the Department of Marine Resources; the Bureau of Parks and Lands, Submerged Lands Program; the Federal Emergency Management Agency; the Maine Department of Inland Fisheries and Wildlife; and U.S. Fish and Wildlife Service.
5. The applicant shall minimize large tree removal to only that which is proposed (5 trees) or to only that which is needed to install the permanent docking structure (whichever is fewer). In addition, within 75 feet of the mean high water level one footpath is permitted, provided it does not exceed six (6) feet in width as measured between tree trunks and has at least one bend in its path to divert channelized runoff.
6. The use of untreated lumber is preferred, although pressure-treated wood approved by the U.S. Environmental Protection Agency for dock construction may be used. Creosote or pentachlorophenol (PCP) treated wood must not be used.
7. Once construction is complete, the permittee(s) shall submit a self-certification form, notifying the Commission that all conditions of approval of this permit have been met. The permittee shall submit all information requested by the Commission demonstrating compliance with the terms of this permit.

This permit is approved upon the proposal as set forth in the application and supporting documents, except as modified in the above stated conditions, and remains valid only if the permittee complies with all of these conditions. Any variation from the application or the conditions of approval is subject to prior Commission review and approval. Any variation undertaken without Commission approval constitutes a violation of Land Use Planning Commission law. In addition, any person aggrieved by this decision of the staff may, within 30 days, request that the Commission review the decision.

DONE AND DATED AT BANGOR, MAINE, THIS 10TH DAY OF FEBRUARY, 2014.

By: 
for Nicholas D. Livesay, Executive Director



STATE OF MAINE
DEPARTMENT OF CONSERVATION
22 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0022

STANDARD CONDITIONS OF APPROVAL FOR ALL SHORELAND ALTERATION PERMITS

1. The permit certificate must be posted in a visible location on your property during performance of the activities approved by this permit.
2. This permit is dependent upon and limited to the proposal as set forth in the application and supporting documents, except as modified by the Commission in granting this permit. Any variation therefrom is subject to the prior review and approval of the Maine Land Use Regulation Commission. Any variation from the application or the conditions of approval undertaken without approval of the Commission constitutes a violation of Land Use Regulation Commission law.
3. Activities permitted in this permit must be begun within two (2) years of date of issue and completed within three (3) years from date of issuance of this permit. If such activities are not begun and completed within this time limitation, this permit shall lapse and no activities shall then occur unless and until a new permit has been granted by the Commission.
4. The recipient of this permit ("permittee") shall secure and comply with all applicable licenses, permits, and authorizations of all federal, state and local agencies including, but not limited to, permits required under the Natural Resources Protection Act administered by the Maine Department of Environmental Protection.
5. The scenic character and healthful condition of the area covered under this permit must be maintained. The area must be kept free of litter, trash, junk cars and other vehicles, and any other materials that may constitute a hazardous or nuisance condition.
6. All areas of exposed mineral soil above the normal high water line or wetland boundary shall be promptly seeded and mulched so as to avoid soil erosion and lake sedimentation. Rocks and trees which are holding the shoreline and preventing erosion shall not be removed.
7. Unless otherwise specified in this permit, all work must be conducted at periods of low water when the water level is lower than the work area.
8. Unless otherwise specified in this permit, no mechanical equipment, machinery or vehicles shall be operated below the normal high water line or wetland boundary.
9. If pressure treated wood is to be used, such wood must be allowed to cure, away from the waterbody or wetland, for a minimum of three weeks prior to installation.
10. Once the activity is completed, the permittee shall notify the Commission that all requirements and conditions of approval have been met. The permittee shall submit all information requested by the Commission demonstrating compliance with the terms of the application and the conditions of approval. Following notification of completion, the Commission's staff may arrange and conduct a compliance inspection.

O. PERMANENT DOCKING STRUCTURES

Except as hereinafter provided, permanent docking structures not in conformance with the standards of this Section are prohibited.

To be granted a permit, permanent docking structure proposals must meet the General Criteria for Approval, Section 10.24, and the Criteria for Wetland Alterations, Section 10.25,P, in addition to any applicable requirements set forth in this Section. Permanent docking structures proposed in a (P-FP) Flood Prone Protection Subdistrict, or in an area identified on a Federal Emergency Management Agency (FEMA) Flood Hazard Boundary or Flood Insurance Rate Map, must also meet the applicable provisions of Section 10.25,T.

1. Reconstruction of Permanent Docking Structures.

- a.** A permit for reconstruction shall not be issued unless the permanent docking structure is legally existing. For docks larger than the size limitations for new or expanded docks in Section 10.27,O,2,b, the size of the reconstructed dock must be no more than 90 percent of the size of the original structure. The dock shall be reconstructed in the same location, except as provided for in Section 10.27,O,1,d. The reconstructed structure must not extend farther into the waterbody than the existing structure. Reconstruction of a permanent docking structure shall not include reconstruction of any other structure, such as a shed or boathouse, which is attached to the docking structure, except as provided for in a (D-MT) Maritime Development Subdistrict. Reconstructed docks must meet the construction standards in Section 10.27,O,4.
- b.** An application to obtain a permit to reconstruct a permanent docking structure must be completed and filed within two years of the date of damage, destruction, or removal; and a permit shall not be issued unless the docking structure was functional within a two year period immediately preceding the damage, destruction, or removal.
- c.** Reconstruction may not take place within significant wildlife habitat, as defined in Section 10.02 of the Commission's Land Use Districts and Standards, or impact rare plants and natural communities, as identified by the Maine Natural Areas Program. Reconstruction may not take place within 250 feet of essential wildlife habitat, as defined in 12 M.R.S.A., Chapter 713, Subchapter V, Sections 7754 and 7755-A unless the applicant has obtained approval from the Maine Department of Inland Fisheries and Wildlife.
- d.** The reconstructed docking structure must be in the same location on the shoreline as the existing structure, except that when possible, reconstructed structures not meeting the minimum property line setback must be relocated to meet the property line setback.
- e.** The reconstructed docking structure must not interfere with, or reduce the opportunity for, existing navigation and recreational uses of the site.
- f.** The reconstructed docking structure and activities associated with reconstruction must not alter the hydrology of the waterbody, permanently interfere with natural flow, or cause impoundment of the waterbody in excess of the existing structure. Fish passage must not be blocked.

- g. Activities associated with reconstruction of docking structures located in flowing waters must take place between July 15 and October 1. In standing waters, activities must be conducted during a period of low water, and for flowed lakes when the lake bottom is exposed.

2. New or Expanded Permanent Docking Structures.

a. Special Exception Criteria for Permanent Docking Structures on Tidal and Non-Tidal Waters.

- (1) New or expanded permanent docking structures may be approved only where the applicant has demonstrated by substantial evidence that:
 - (a) The siting, location and size of such structure will not interfere with navigation; and
 - (b) In the case of a permanent docking structure to serve private, non-commercial activities, it is infeasible to utilize a temporary docking structure due to unusual or extraordinary physical conditions of the site, including, but not limited to, conditions that will not allow anchoring of a temporary structure or wind and wave action sufficient to preclude the use of a temporary structure. The burden of proof is on the applicant to demonstrate the necessary site conditions; or
 - (c) In the case of a permanent docking structure to serve public or institutional activities, a permanent docking structure is necessary for public safety and convenience; or
 - (d) In the case of a permanent docking structure to serve commercial or industrial activities, a permanent docking structure is reasonably necessary, and a temporary docking structure is not feasible or adequate to provide for public safety and convenience.
- (2) The special exception criteria of “no alternative site” shall be judged according to the following:
 - (a) Proximity to a public or commercial dock.

For private, non-commercial docks on the mainland, the following shall constitute “an alternative site reasonably available to the applicant”:

- (i) An existing public or commercial dock located within 15 road miles or 5 miles by water of the applicant’s proposed development; or
- (ii) A proposed public or commercial dock located within 15 road miles or 5 miles by water of the applicant’s proposed development, provided such a facility is proposed for construction within 2 years of the date of the application.

For private, non-commercial docks located on an island, the following shall constitute “an alternative site reasonably available to the applicant”:

- (iii) An existing public or commercial dock located on the island where the applicant’s dock would be located; or

- (iv) A proposed public or commercial dock located on the island where the applicant's dock would be located, provided such a facility is proposed for construction within 2 years of the date of the application;
 - (b) Proximity to other means of access. For private, non-commercial docks, an existing sandy beach area where a small boat may be landed and pulled ashore shall constitute "an alternative site reasonably available to the applicant"; and
 - (c) Proximity to less ecologically sensitive areas. An alternative site that would result in the least environmental impact while still providing access shall constitute "an alternative site reasonably available to the applicant". Ecologically sensitive areas include, but are not limited to, areas defined as Significant Wildlife Habitat in Section 10.02; eel grass beds; salt marsh or emergent marsh vegetation; or other high value fisheries and wildlife habitat.
- b. Maximum Dimensions.** The new or expanded permanent docking structure must be no longer or wider than is necessary for the use intended, and meet the following:
- (1) **Tidal Waters.**
 - (a) Maximum length. A dock must not be constructed within a marked navigable channel, and
 - (i) A private, non-commercial dock must extend no farther than 100 feet beyond the mean lower low water level, or no farther than is necessary to achieve a draft of 5 feet of water at mean lower low water, whichever is less; or
 - (ii) A public or commercial dock must extend no farther than 100 feet beyond the mean lower low water level, or no farther than is necessary to achieve a draft of 8 feet of water at mean lower low water, whichever is less; and
 - (b) Maximum width. A private, non-commercial dock must be no wider than 8 feet.
 - (2) **Non-Tidal Waters.**
 - (a) Maximum length.
 - (i) A private, non-commercial dock must extend no farther than 50 feet beyond the normal high water mark; or
 - (ii) A public or commercial dock must extend no farther than 75 feet beyond the normal high water mark; and
 - (b) Maximum width. A private, non-commercial dock must be no wider than 8 feet.

3. Normal Maintenance and Repair.

- a.** In accordance with Section 10.02, normal maintenance and repair of permanent docking structures does not require a permit.
- b.** Except as provided for in a (D-MT) Maritime Development Subdistrict, boathouses and floatplane hangers may be maintained in accordance with the provisions for normal maintenance and repair in Section 10.02, but may not be reconstructed.

4. Construction Standards.

- a.** New or expanded docking structures must be constructed using methods, such as pilings, that allow for free flowing water and fish passage beneath the dock. Reconstructed docking structures must be pile-supported where feasible. Construction methods, such as rock filled cribs, that place fill below the normal high water mark of tidal or non-tidal waters may only be allowed where the applicant demonstrates by a preponderance of evidence that non-fill construction techniques are not practicable;
- b.** When located over eel grass beds, or salt or emergent marsh vegetation that is ten feet or greater in width, the deck height above the substrate must be at least equal to the dock's width;
- c.** The use of untreated lumber is preferred, although pressure-treated wood approved by the U.S. Environmental Protection Agency for dock construction may be used. Chromated copper arsenate (CCA) treated wood must not be used in freshwater environments. Creosote or pentachlorophenol (PCP) treated wood must not be used.
- d.** Uncured concrete must not be placed directly in the water. Concrete must be pre-cast and cured at least three weeks before placing it in the water or, where necessary, must be placed in forms and must cure at least one week before the forms are removed; and
- e.** Except within (D-MT) Maritime Development Subdistricts, new or expanded permanent docks must not include or accommodate non-water dependent structures, including but not limited to, gazebos, screen houses, or other enclosed or semi-enclosed structures.

T. ACTIVITIES IN FLOOD PRONE AREAS

All development in flood prone areas, including areas of special flood hazard, as identified by P-FP subdistricts or Federal Emergency Management Agency (FEMA) Flood Boundary and Floodway, Flood Hazard Boundary or Flood Insurance Rate maps, shall meet the following applicable requirements and standards:

1. Procedural Requirements.

- a. Where a special flood hazard area is indicated solely by a P-FP subdistrict, the area will be regulated according to standards applicable to the A zone.
- b. Determinations of base flood elevations (bfe) in P-FP subdistricts and A zones and flood prone areas shall be made in a consistent manner, according to methods outlined in the document “Dealing with Unnumbered A Zones in Maine Floodplain Management,” revised 09/17/09.
- c. Base flood elevations for A1-30, AE and VE zones shall be those determined by FEMA in a Flood Insurance Study, where available.
- d. If P-FP zones and A1-30, AE, A, or VE zones apply to an area where FEMA has issued a Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR) to an applicant determining that the structure or property is not located in the area of special flood hazard, the requirements of Sections 10.23,C and 10.25,T, shall not apply to the structure or property specified in the LOMA or LOMR.
- e. Applicants shall notify adjacent towns, plantations and townships in writing prior to any alteration or relocation of a watercourse when project applications propose alterations or relocations of flowing waters in a Flood Prone Area Protection (P-FP) Subdistrict or FEMA zone.

2. Development Standards.

- a. Development in flood prone areas, including areas of special flood hazard, shall:
 - (1) Be designed or modified and adequately anchored to prevent flotation (excluding floating piers and docks), collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
 - (2) Use construction materials that are resistant to flood damage;
 - (3) Use construction methods and practices that will minimize flood damage; and
 - (4) Use electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during flooding conditions.
- b. **Water Supply.** All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems.
- c. **Sanitary Sewage Systems.** All new and replacement sanitary sewage systems shall be designed and located to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters.

- d. **On-Site Waste Disposal Systems.** On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during floods.
- e. **Watercourse Carrying Capacity.** All development associated with altered or relocated portions of a watercourse shall be constructed and maintained in such a manner that no reduction occurs in the flood carrying capacity of the watercourse.
- f. **Residential Structures.** New construction or substantial improvement of any residential structure shall have the lowest floor (including basement) elevated to at least one foot above the base flood elevation, and when located within Zone VE, meet the requirements for Coastal Floodplains in Section 10.25,T,2,p.
- g. **Nonresidential Structures.** New construction or substantial improvement of any nonresidential structure shall:
 - (1) Have the lowest floor (including basement) elevated to at least one foot above the base flood elevation, or
 - (2) Together with attendant utility and sanitary facilities:
 - (a) Be floodproofed to at least one foot above the base flood elevation so that below that elevation the structure is watertight with walls substantially impermeable to the passage of water;
 - (b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy; and
 - (c) Be certified by a registered professional engineer or architect that the floodproofing design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of Section 10.25,T. Such certification shall be provided with the application for any permit and shall include a record of the elevation above mean sea level to which the structure is floodproofed.
 - (3) When located within Zone VE, meet the requirements for Coastal Floodplains in Section 10.25,T,2,p.
- h. **Manufactured Homes.** New manufactured homes or substantial improvements of any manufactured home shall:
 - (1) Be elevated such that the lowest floor (including basement) of the manufactured home is at least one foot above the base flood elevation;
 - (2) Be on a permanent foundation, which may be poured masonry slab or foundation walls, with hydraulic openings, or may be reinforced piers or block supports, any of which support the manufactured home so that no weight is supported by its wheels and axles; and

- (3) Be securely anchored to an adequately anchored foundation system to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to:
 - (a) Over-the-top ties anchored to the ground at the four corners of the manufactured home, plus two additional ties per side at intermediate points (manufactured homes less than 50 feet long require one additional tie per side); or by
 - (b) Frame ties at each corner of the home, plus five additional ties along each side at intermediate points (manufactured homes less than 50 feet long require four additional ties per side).

All components of the anchoring system described in (a) and (b) above shall be capable of carrying a force of 4800 pounds.

- (4) When located within Zone VE, meet the requirements for Coastal Floodplains in Section 10.25,T,2,p.

i. Recreational Vehicles. Recreational vehicles shall either:

- (1) Be on the site for fewer than 90 consecutive days, and be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
- (2) Be permitted in accordance with the elevation and anchoring requirements for manufactured homes in Section 10.25,T,2,h.
- (3) When located within Zone VE, be on the site for fewer than 90 consecutive days and be fully licensed and ready for highway use, or meet the requirements for Coastal Floodplains in Section 10.25,T,2,p.

j. Accessory Structures. Accessory structures, as defined, located within Zones A1-30, AE, and A, shall be exempt from the required elevation criteria if all other requirements of Section 10.25,T and the following are met. Exempt accessory structures shall:

- (1) Be 500 square feet or less and have a value less than \$3,000;
- (2) Have unfinished interiors and not be used for human habitation;
- (3) Have hydraulic openings, as specified in Section 10.25,T,2,l,(2), in at least two different walls of the accessory structure;
- (4) Be located outside the floodway, as determined by the provisions of Section 10.25,T,2,k;
- (5) When possible be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters and be placed further from the source of flooding than is the primary structure; and
- (6) Have only ground fault interrupt electrical outlets. The electric service disconnect shall be located above the base flood elevation and when possible outside the Area of Special Flood Hazard.

k. Development in Floodways.

- (1) In Zones A1-30 and AE adjacent to areas of flowing water, encroachments, including fill, new construction, substantial improvement and other development shall not be permitted within a regulatory floodway which is designated on the township's, plantation's, or town's "Flood Insurance Rate Map" or "Flood Boundary and Floodway Map," unless a technical evaluation certified by a registered professional engineer is provided demonstrating that such encroachments will not result in any increase in flood levels within the township, plantation, or town during the occurrence of the base flood discharge.
- (2) In Zones A1-30, AE, and A adjacent to areas of flowing water, for which no regulatory floodway is designated, encroachments, including without limitation fill, new construction, substantial improvement and other development shall not be permitted in the floodway as determined in Section 10.25,T,2,k,(3) below unless a technical evaluation certified by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing development and anticipated development:
 - (a) Will not increase the water surface elevation of the base flood more than one foot at any point within the township, plantation, or town; and
 - (b) Is consistent with the technical criteria contained in Chapter 5 entitled "Hydraulic Analyses," Flood Insurance Study - Guidelines and Specifications for Study Contractors, (FEMA 37/ January 1995, as amended).
- (3) In Zones A1-30, AE, and A adjacent to areas of flowing water for which no regulatory floodway is designated, the regulatory floodway is determined to be the channel of the river or other flowing water and the adjacent land areas to a distance of one-half the width of the floodplain as measured from the normal high water mark to the upland limit of the floodplain.

l. Enclosed Areas Below the Lowest Floor. New construction or substantial improvement of any structure in Zones A1-30, AE, and A that meets the development standards of Section 10.25,T, including the elevation requirements, and is elevated on posts, columns, piers, piles, stilts, or crawl spaces may be enclosed below the base flood elevation requirements provided all the following criteria are met or exceeded:

- (1) Enclosed areas are not basements as defined in Section 10.02;
- (2) Enclosed areas shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood water. Designs for meeting this requirement must either:
 - (a) Be engineered and certified by a registered professional engineer or architect; or
 - (b) Meet or exceed the following minimum criteria:
 - (i) A minimum of two openings having a total net area of not less than one square inch for every square foot of the enclosed area;
 - (ii) The bottom of all openings shall be below the base flood elevation and no higher than one foot above the lowest grade; and

- (iii) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the entry and exit of flood waters automatically without any external influence or control such as human intervention, including the use of electrical and other non-automatic mechanical means;
- (3) The enclosed area shall not be used for human habitation; and
- (4) The enclosed areas are usable solely for building access, parking of vehicles, or storage.
- m. Bridges.** New construction or substantial improvement of any bridge shall be designed such that:
 - (1) When possible, the lowest horizontal member (excluding the pilings, or columns) is elevated to at least one foot above the base flood elevation; and
 - (2) A registered professional engineer shall certify that:
 - (a) The structural design and methods of construction shall meet the elevation requirements of Section 10.25,T,2,m,(1) above and the floodway standards of Section 10.25,T,2,k; and
 - (b) The foundation and superstructure attached thereto are designed to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all structural components. Water loading values used shall be those associated with the base flood.
- n. Containment Walls.** New construction or substantial improvement of any containment wall shall:
 - (1) Have the containment wall elevated to at least one foot above the base flood elevation;
 - (2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy; and
 - (3) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of Section 10.25,T. Such certification shall be provided with the application for a permit.
- o. Commercial Wharves, Piers and Docks.** A registered professional engineer shall develop or review the structural design, specifications, and plans for the new construction or substantial improvement of commercial wharves, piers, and docks.

p. Coastal Floodplains.

- (1) All development shall be located landward of the reach of mean high tide except for wharves, piers and docks or as provided in Section 10.25,T,2,p,(6) below.
- (2) New construction or substantial improvement of any structure located within Zone VE shall:
 - (a) Be elevated on posts or columns such that:
 - (i) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to one foot above the base flood elevation;
 - (ii) The pile or column foundation and the elevated portion of the structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components; and
 - (iii) Water loading values used shall be those associated with the base flood. Wind loading values used shall be those contained in the FEMA Coastal Construction Manual, June 2000.
 - (b) Have the space below the lowest floor:
 - (i) Free of obstructions; or
 - (ii) Constructed with open wood lattice-work, or insect screening intended to collapse under wind and water without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting piles or columns; or
 - (iii) Constructed with non-supporting breakaway walls which have a design safe loading resistance of not less than 10 or more than 20 pounds per square foot.
 - (c) Require a registered professional engineer or architect to:
 - (i) Develop or review the structural design, specifications, and plans for the construction, which must meet or exceed the technical criteria contained in the Coastal Construction Manual, (FEMA-55/June 2000); and
 - (ii) Certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the criteria of Section 10.25,T,2,p,(2).
- (3) The use of fill for structural support in Zone VE is prohibited.
- (4) Human alteration of sand dunes within Zone VE is prohibited unless it can be demonstrated that such alterations will not increase potential flood damage.
- (5) Enclosed areas below the lowest floor may be used solely for parking vehicles, building access, and storage.

- (6) Lobster sheds and fishing sheds may be located seaward of mean high tide and shall be exempt from the elevation requirement only if permitted as a special exception, and if all the following requirements and those of Section 10.25,T,2,a,k, and l are met:
 - (a) The special exception shall be limited to low value structures such as metal or wood sheds 200 square feet or less and shall not exceed more than one story.
 - (b) The structure shall be securely anchored to the wharf or pier to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components.
 - (c) The structure will not adversely increase wave or debris impact forces affecting nearby buildings.
 - (d) The structure shall have unfinished interiors and shall not be used for human habitation.
 - (e) Any mechanical, utility equipment and fuel storage tanks must be anchored and either elevated or floodproofed to one foot above the base flood elevation.
 - (f) All electrical outlets shall be ground fault interrupt type. The electrical service disconnect shall be located on shore above the base flood elevation and when possible outside the Special Flood Hazard Area.